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Dynamism in Marketing Margins: A Case Study of Foodgrain Commodities

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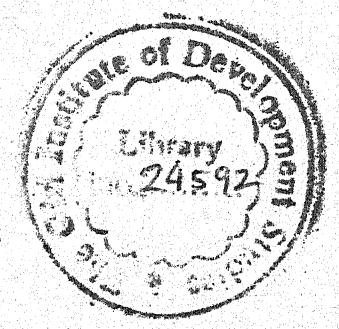

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There has been a good deal of talk and debate among economists and policy makers alike on the question of sharing benefits between the cultivators and intermediaries. It is generally contended that producers share much less than what the intermediaries do. One of the main reasons advocated for the lower proportion of the producers share in prices paid by the consumers is the large magnitude of gross marketing margins of the intermediaries operating in marketing process. The gross marketing margins are nothing but the difference between the price paid by the ultimate consumers and price received by the producers. The gross marketing margins include the cost of marketing involved in assembling, processing, storage, transportation and handling of commodities and the profit margins of intermediaries involved in marketing process. Therefore, a higher magnitude of intermediaries marketing margins and higher marketing costs as well are not only an additional burden on consumers but also an element to reduce the producers share in consumer's price which in turns exerts retrogressive effect on the growth of agricultural production. In order to ensure a sizeable share to the producers in consumers price the state has intervened in agricultural

marketing system by way of market regulation (MR) and support price policies. Therefore, the study in the dynamics of the producer's share and market margin of important foodgrain commodities seems to be very purposeful and relevant from the view points of the state involvement in the market and for further policy implications. The present study is an attempt in this direction.

Key Terms Involved

The interpretations and analysis carried out in this paper are associated with three main terms as (i) Regulated Markets; (ii) Producers; and (iii) Intermediaries. The explanation of these key terms, thus, is a prerequisite for the avertion of any possible confusion and to bring clearity in comprehension.

(i) Regulated Market : The agricultural marketing system in our country is by and large regarded as operationally inefficient and exploitative in character. Without doubt, there can be a few situation where there is not considerable scope for improving and adopting better methods and organisation for the marketing of agricultural products. In order to remove the various marketing bottlenecks, there has been state intervention since very long back. A close scrutiny of the state intervention strategies in agricultural marketing indicates that the state intervention has been directly and indirectly. The direct state interventions in the market are aimed at to eliminate private trade completely or partially and evolve a parallel system. The

Food Corporation of India, Cotton Corporation of India, Procurement Programmes and Zonal Marketing Restrictions are the part of direct state intervention policy.

Through the indirect intervention, the existing private trade dominated markets are allowed to function within the parameters of regulations set by the state in such way to serve as a protective shield to the sellers of farm produce against the traders rapacity. This type of indirect state intervention in agricultural marketing is known as state regulation and markets functioning under such state regulation is known as Regulated Markets. The sole objective of market regulation by the state is to eliminate unnecessary activities in exchange that are unproductive of use value, explicitly to organise the system of sale and purchase in manner that sellers secure a fair return by marketing their products.

(ii) Producers : The term producer in agricultural marketing is generally referred for those who actually cultivate the land in given agrarian conditions. However, in this paper producers have been considered in a specific sense. Only those farmers who produce the important grains like wheat, rice, maize and gram, generate the surplus of these foodgrains and come to the Saharanpur market yard for the sale of their surplus, are the producers referred to in the paper. These may be small producers, big producers or both. Their marketing reasons and conditions may be divergent. However, both of them when come to the market for the sale of their produce expect a fair return. Since the

basic objective of this paper has been to assess that to what extent the share of surplus generating farmers irrespective of their land size and other conditions, have moved up over the years vis-a-vis other important intermediaries in the ultimate price paid by the consumers. Therefore, the producers considered in this paper are both the small and big and are grains surplus generating and involved in its marketing.

(iii) Intermediaries : The term intermediary is generally referred to the person or agency involved in between two or more parties for materialising the deal. In the literature on agricultural marketing, the intermediaries are generally indicated to those who remain involved in the marketing process since the farmers dispose their produce till it reaches to the consumers. The chain of such intermediaries are always long in our agrarian characteristics. It may include various types of private traders, state agencies and others who remain associated in one or other ways in channelising the produce from producers to the consumers. However, in the paper, the term intermediary has been used in a limited sense. The term market intermediary or market functionary has been used to denote the private traders who are very crucial in managing the marketed surplus generated in the agricultural sector. These traders have been divided as wholesalers and retailers as per the nature and size of their marketing operations. Therefore, the marketing margins of these two important

intermediaries have been taken into account and analysed in temporal perspectives.

Estimation of Marketing Margins : Earlier Studies

The available literature on the estimation of producers share and intermediaries margin is very substantial but the results vary with the type of commodity, method of calculation and place and time of investigation. In his study, Raj Krishna has observed that the producer's share is 68.5 per cent and 66.80 per cent in case of wheat and rice respectively whereas traders margins have come out 5.2 per cent and 9.4 per cent respectively.[1] Krishnaswamy, et.al., found that farmer's share ranges between 82 per cent to 93 per cent in wheat trade in three markets of Rajasthan.[2] Joshi and Sharma studied the price spread for rice in the states of Andhra Pradesh, Bihar, Karnataka, Orissa, Tamil Nadu and West Bengal during 1960-61 and 1973-74 by analysing the difference between the retail price and farm harnest price ($P_R - P_F$) and the percentage of marketing margins, i.e. $(\frac{P_R - P_F}{P_F})$. The price spread was found to be substantially higher during the post Green Revolution period as compared to the earlier period, indicating that the profits of intermediaries and the cost of marketing increased in later period than earlier period.[3] Chauhan and Singh calculated costs and margins of wheat marketing in eight markets of Rajasthan during 1969-70 to 1970-71. The study indicated that margins and costs increased with the increase in the length of

marketing channels which led to the decline in the producer's net share.[4] Singh, Verma and Agarwal studied the marketing costs and margins of wheat during 1969-70 in different channels of marketing in one of the primary markets of Rajasthan. Surprisingly, the producer's share was 88 per cent in both channels and hence it could not be concluded that particular channel is efficient than other.[5] Raju and Von Oppen worked out margins for Jowar, Bajra, Arhar, Gram and Groundnut in markets of Warangal, Khammam and Tandur of Andhra Pradesh on the basis of 1975-76 data. The results revealed that across crops, the producer's share in consumers rupee decreased with the increase in the amount of services required for transformation of the raw product into consumable commodity.[6] Singh, et.al., examined the producers share and margins of different agencies involved in marketing of wheat and paddy during mid-sixties and in 1978-79 to know the impact of state intervention in marketing of agricultural products in Punjab. Noticeable changes in margins and overall market efficiency have been brought out by the study.[7] Thakur's study in Gujarat observed that market margins for traders vary from market to market and also from one community to another in the same market. For example in Patan market, wholesaler's margin was 19 per cent for millets and 9 per cent for wheat. In Camby market wholesaler's margin was 19 per cent for millets and 9 per cent for wheat. In Camby market retailer's margin was 12 per cent for millets and 8 per cent for wheat.[8] Mishra and Singh analysed

the producer's share and middlemen's margin of wheat in two markets of Faizabad district of Uttar Pradesh and concluded that due to the presence of large number of middlemen in marketing system, the producers got a lower share ranging from 76.94 per cent in one channel to 69.43 per cent in other channel.[9]

An overview of the above studies revealed that most of the studies relate to one of the foodgrains like wheat or paddy or gram and have been conducted at only one point of time in different agro-spatial conditions. Moreover the producer's share and intermediaries margins have not been comprehensively studied in case of any of the regulated markets of Uttar Pradesh, covering the marketing of all important foodgrain commodities and comparing the changes in the marketing margins over a period of time.

Analytical Framework

There are three main methods of calculating marketing margins. One way is to select a lot of transaction in the primary market and trace it right upto the consumer market and then assess costs and margins at each of the successive stages of marketing. In this method, the main difficulty is to trace the movement of lot from the first functionary to the last one. Generally the individual lot looses its identity during the process of movement. Some of its portion may be purchased by the consumers while the rest may be stored for several months. Further, a part of this might reach to the nearby consumers while the other part might have gone away.

The second method is to make the comparison of prices at different levels of marketing over the same point of time. In this method, the availability of representative and comparable gradewise prices at each level of marketing is essential. The third method is the summation of average gross margins obtained by dividing the money value of sale minus money value of purchase by the number of units transacted for each type of marketing agency. In this method, proper adjustment between the quantities purchased and sold is necessary for waste and other physical losses which occur during the process of marketing.[10]

Margins as calculated by second method may be concurrent or lagged. Concurrent margin refers to the difference between the prices prevailing at successive stages of marketing on the same date while lagged margin is the difference between the price of farm produce obtainable at a particular stage of marketing and the price paid for it at the preceeding stage of marketing during an earlier period, the length of time between the two dates being the average period for which the marketing agency holds the product. Concurrent margins do not take into account the time that elapes between purchase and sale of the produce by the same party either due to the processing or stock holding for price consideration. Lagged margins take into account the time that elapes between purchase and sale. In the analysis carried out in this paper, the margins have been estimated by comparing the prices at different levels of marketing with the help of concurrent method without considering the time

lag involved. The difference between the prevailing prices on the same date at successive stage of marketing are worked out for determining the producer's share and margins of various intermediaries in consumer's price. The difference so emerged at various marketing stages provide the gross marketing margins. From these gross marketing margins, the various marketing costs as incurred by the intermediaries concerned are substracted and the resultant figures provide an idea of the net marketing margins. The producers share and intermediaries margins calculated by the concurrent method can be expressed in the following notational forms:

Gross Marketing Cost = $Tc = C_F + \sum mci$

Gross Marketing Margin = $MC_1 = Pc - Pp$

Proportion of Gross Marketing Margin in Consumer's Price = $MC_1 = \frac{Pc - Pp}{Pc} \times 100$

Proportion of Producer's Gross Share in Consumer's Price = $Sp = \frac{Pc - Mc_1}{Pc} \times 100$

Proportion of Producer's Net Share in Consumer's Price = $Sp_1 = \frac{Pc - Mc_1 - C_F}{Pc} \times 100$

Proportion of Wholesaler's Gross Margin in Consumer's Price = $Mw = \frac{Sw - Pw}{Pc} \times 100$

Proportion of Wholesaler's Net Margin in Consumer's Price = $Mw_1 = \frac{Sw - Pw - Cw}{Pc} \times 100$

Proportion of Retailer's Gross Margin in Consumer's Price = $M_R = \frac{S_R - P_R}{Pc} \times 100$

Proportion of Retailer's Net Margin in Consumer's Price = $M_{R_1} = \frac{S_R - P_R - C_R}{Pc} \times 100$

Where C_F is the producer's marketing cost, $\sum mci$ is the cost incurred by the intermediaries, Pc is the consumer's retail price, Pp is the produce's selling price, MC_1 is the gross

marketing margin or price spread, Sw is the wholesaler's selling price, Pw is the wholesaler's purchase price, Cw is the wholesaler's cost of marketing, S_R is the retailers selling price, P_R is the retailer's purchase price and C_R denotes the retailers marketing cost.

The Data

The analysis of the paper is based on the primary data collected from the 240 producers and 59 traders randomly selected from the Saharanpur market of the district Saharanpur, western region of Uttar Pradesh. The data pertain to the years 1975-76 and 1985-86. The two point data were purposely collected to examine the movement in the margins of farmers and intermediaries in marketing process. No doubt, there has been an increase in the prices of all food items in 1985-86 over 1975-76 and the changes in prices may also not be uniform at the various levels of marketing. Therefore, the problem arises about the comparability of the margins and costs at two points of time. Such a limitation of the analysis has been minimised, though not altogether eliminated, by working out the marketing margins and marketing cost in terms of proportions by assuming the consumers price as hundred.

Producer's Share in Foodgrains Marketing

The proportionate gross share, marketing cost and net share of producers in consumers price of important foodgrain commodities namely wheat, rice, maize and gram have been worked

out for the year 1975-76 and 1985-86 in case of Saharanpur market yard and the results are shown in Table 1. It may be seen from this table that the producer's gross share across all these four commodities ranges between 79 per cent of rice to 75 per cent of gram in the year 1975-76 which is the period when trading was centred in Saharanpur city and grain business was not shifted in new yard. However, it is perceptible that producers gross share increased during 1985-86 to 82 per cent of rice and 77 per cent of gram. Therefore, there is no doubt that the producer's gross share in consumer's price in the marketing of four important foodgrain commodities has increased during the post market regulation period than in the pre-regulation period.

Table 1 : Percentage of Producer's Gross Share Marketing Cost and Net Share in Consumer's Price in Saharanpur Market.

Commodity/Year	Producer's Gross Share	Producer's Cost of Marketing	Producer's Net Share
Wheat : 1975-76	78.21	5.85	72.36
1985-86	81.01	3.13	77.88
Rice : 1975-76	79.22	5.20	74.02
1985-86	82.18	2.84	79.34
Maize : 1975-76	76.38	4.80	71.58
1985-86	82.19	2.84	79.35
Gram : 1975-76	75.35	6.29	69.06
1985-86	77.19	3.50	73.69

Source : Primary Data Based.

However, the gap between maximum and minimum proportions of producer's gross share across four commodities has increased to 5 per cent in the latest period as against the variation of 4 per cent in the earlier period. This trend indicates that producers have been benefited undoubtedly in the marketing of important foodgrain commodities by the state involvement in the market but the variations in the producer's gross share in the consumer's price at inter-commodity marketing levels have increased in the later period as compared with the earlier one.

The variability in the producer's gross share in consumer's price at inter-commodity level further reflects from the percentage increase in producers' gross share during 1975-76 and 1985-86. The producer's gross share increased by 5.81 per cent in case of maize, by 2.96 per cent in case of rice, by 2.80 per cent in respect of wheat and by 1.84 per cent in case of gram between the two periods. Therefore, in gram and wheat marketing the increase in producer's gross share has been lower that maize and rice which necessitates more strict enforcement of regulatory provisions in gram and wheat marketing.

The observations made in the context of the gross share of producer's in consumer's price are further revealed from the changes in producer's cost of marketing and net returns. The increase evident in the net share of producer's in 1985-86 from 1975-76 is very similar to that of producer's gross share in consumer's price. But reduction in the producer's cost of marketing indicates different pattern at the inter-commodity

level. Although, the reduction in the producer's marketing cost of foodgrain commodities has been the general feature in 1985-86 from 1975-76 but among four foodgrain commodities under consideration here, viz. maize demonstrated lowest reduction of 1.96 per cent in producer's marketing cost as against the largest increase of gross and net shares of producer's in the prices paid by consumers in its marketing during 1985-86 from 1975-76. The divergent reductions in the producer's cost of marketing at the inter-commodity level have resulted from the different market margins adjustments made by the traders after the shifting of trade in new market of Saharanpur. For instance, among all four commodities, the reduction in the produce's cost of marketing has been as lowest as 1.96 per cent in maize marketing during 1975-76 and 1985-86 but the margins of intermediaries in the trade of maize declined which was highest at 2.88 per cent during the same period, enhancing the producer's gross and net shares in consumer's price of maize at largest level among all four commodities. Therefore, if the marketing cost in maize trade could have been reduced to the level in other commodities, the producer's share in maize marketing would have increased much higher than what has been observed in 1985-86 from 1975-76.

Thus the producer's gross and net returns from the marketing of wheat, rice, maize and gram have increased considerably after the regulation of Saharanpur market. The improvement in the foodgrains marketing has reflected from the overall reduction

in the producer's cost of marketing. However, the range of variation in producer's gross share, net share and marketing cost in the consumers price of different commodities has increased in 1985-86 from 1975-76. Therefore, such foodgrain commodities need to be identified in which producer's shares are lower and producer's marketing cost is still higher in comparison with other commodities so that proper emphasis could be laid on the improvement of market efficiency. The limited analysis carried out here indicates that the marketing of two foodgrain commodities namely gram and rice requires immediate intervention by the state for improving the marketing of these commodities. In case of maize, steps are required to be taken to reduce the producer's cost of marketing.

Intermediaries Margins

The proportions of gross and net marketing margins of wholesaler's in consumer's price have been worked out by properly taking into account their marketing costs and results are placed in Table 2. It is evident from the table that wholesaler's gross margins and marketing costs have declined in the trade of all four commodities from earlier to the later period. The decline in the gross margin during the period has been by 2.26 per cent in case of wheat, by 0.83 per cent in case of rice, by 0.51 per cent in respect of maize and by 0.18 per cent in case of gram. Likewise the share of marketing cost of wholesaler's also declined by 1.40 per cent, by 0.77 per cent, by 0.70 per cent and by 0.47 per cent respectively of each crop.

These relative changes in gross marketing margin and market cost in wholesale trade of four important grains brought peculiar changes in the net margins of wholesalers. Their net margin in wheat and rice trade declined by less than one per cent whereas in case of maize and gram the net margins of wholesaler's increased by less than one per cent during 1985-86 as against the year 1975-76. Thus the overall trend of net marketing margin of wholesalers in the trade of wheat, rice, maize and gram indicates that the percentage of net margin in consumer's price fluctuated between 4 per cent to 5 per cent during both the years.

Table 2 : Percentage of Wholesaler's Gross Margin, Marketing Cost and Net Margin in Consumer's Price in Saharanpur Market.

Commodity/Year	Wholesaler's Gross Margin	Wholesaler's Cost of Marketing	Wholesaler's Net Margin
Wheat : 1975-76	9.67	4.65	5.02
1985-86	7.41	3.25	4.16
Rice : 1975-76	8.27	4.04	4.23
1985-86	7.44	3.57	3.87
Maize : 1975-76	9.39	4.55	4.84
1985-86	8.88	3.78	5.10
Gram : 1975-76	10.00	5.20	4.80
1985-86	9.82	4.50	5.32

Source : Primary Data Based

The proportionate shares of retailers gross margins, marketing costs and net margins in case of four commodities have been shown in Table 3. The table indicates that retailers

gross margins have increased by 2.18 per cent in wheat, by 1.13 per cent in gram and by 0.24 per cent in rice but it has gone down by 3.34 per cent in maize trade in the latest period in comparison with the earlier period. The marketing cost of retailers declined in all commodities by 0.55 per cent in case of gram, by 0.20 per cent in respect of maize, by 0.13 per cent in case of wheat and by 0.04 per cent in rice trade.

Table 3 : Percentage of Retailers Gross Margins, Marketing Cost and Net Margin in Consumer's Price in Saharanpur Market.

Commodity/Year	Retailers Gross Margin	Retailers Cost of Marketing	Retailers Net Margin
Wheat : 1975-76	6.27	1.78	4.49
1985-86	8.45	1.65	6.80
Rice : 1975-76	7.30	1.58	5.72
1985-86	7.54	1.54	6.00
Maize : 1975-76	9.43	1.80	7.63
1985-86	6.09	1.60	4.49
Gram : 1975-76	8.36	2.25	6.11
1985-86	9.49	1.70	7.79

Source : Primary data based.

These changes in the retailers gross margin and cost have bearing on the dynamics of net margin of retailers. The net margin of retailers in consumers price increased in the trade of wheat by 2.31 per cent, in rice trade by 0.28 per cent and by 1.68 per cent in gram trade but the retailers net margin declined by 3.14 per cent in maize trade during 1985-86 than the 1975-76 level. While the wholesaler's net margin oscillated

in between 4 per cent and 5 per cent in consumer's price across all commodities during 1975-76 and 1985-86 the retailers net margin varied in between 5 per cent to 8 per cent during the same period.

The comparative proportions of net margin of wholesalers with that of retailers indicate that the retailer's have apportioned relatively larger share of the consumers price in the trade of rice and gram than what the wholesalers have done during both the period. However, the wholesaler's net share was larger than retailers in wheat trade during 1975-76 but the situation reversed in later period of 1985-86. Similarly the wholesaler's net margin was lower than that of retailers in maize trade during the period 1975-76 but the trend reversed in 1985-86. On the whole, the retailers net margin have been found to be higher than the wholesaler's margins in the trade of all important foodgrain commodities.

The variability between the maximum and minimum shares of gross margin, net margin and marketing costs of wholesaler's across the commodities during both the period shows that the gap has widened from 1.73 per cent in case of gross margin, 1.16 per cent in case of marketing cost and 0.79 per cent in respect of net margin in 1975-76 to 2.41 per cent, 1.25 per cent and 1.45 per cent respectively during the later period. In case of retailers, the gap has widened in gross and net margins from 3.16 per cent and 3.14 per cent in 1975-76 to 3.40 per cent and 3.30 per cent respectively during 1985-86. The gap has narrowed only in retailers marketing cost from

0.67 per cent to 0.16 per cent in later period as against the earlier period.

Components of Gross Marketing Margins

The components of gross marketing margin realised by the main intermediaries in the marketing process consist of wholesaler's margin, retailers margin and marketing costs. The percentage distribution of gross margins of intermediaries of Saharanpur market have been shown in the Table 4. The table 24592 shows that the proportion of net margins in total margins of only two intermediaries accounted for more than 76 per cent in the trade of maize, 71 per cent in wheat trade, 69 per cent in rice trade and 68 per cent in gram trade. Therefore, the net margins of intermediaries in the trade of major foodgrain commodities are much higher than their marketing cost. The wholesaler's realised larger margin than retailers in the trade of maize only whereas retailers margins were found to be larger than that of wholesaler's in the trade of wheat, rice and gram.

Table 4 : Distribution Pattern of Intermediaries Margin and Cost in Saharanpur Market.

Commodity	Margin of Intermediaries			Cost of Marketing	Total Marketing Margins
	Wholesalers	Retailers	Total		
Wheat	30.76	40.17	70.93	29.07	100.00
Rice	30.12	38.72	68.84	31.16	100.00
Maize	46.23	29.81	76.04	23.96	100.00
Gram	29.18	38.68	67.86	32.14	100.00

Source : Primary data based.

On the whole, net margins accruing to the intermediaries are still higher. Moreover, the margins have been concluded here on the basis of concurrent method without considering

any time lag involved in the purchase and sale of these four commodities, otherwise, to the extent the intermediaries spread their sales over the years, their margins may tend to be much higher on account of usual seasonal variations in prices.

Conclusions

Briefly it may be concluded that the producers share in the consumers price of all the important foodgrain commodities has increased during the decade 1975-76 - 1985-86. The wholesalers margin has marginally declined whereas the retailers margin has marginally increased in the trade of wheat, rice and gram. Only in the maize trade the margins of both intermediaries declined. It is also very clearly evident from the analysis that the reduction in the cost of marketing of producers, wholesalers and retailers has been a general phenomenon during the post market regulation period. Hence the benefits which producers could get in the form of increase in their shares of the price paid by the final consumer have been an outcome of the reduction in their marketing costs and not of the minimisation of traders margins. Had the margins of only two traders namely wholesalers and retailers would have been reduced, the share accruing to the producers could have been larger. Therefore, it is essential the certain marketing costs of the producers against which traders do not provide any specific service or are just customary like taking away some quantity of grains from marketable lot and deductions made after sales in the pretex of uncleaned and dusty lot, require complete check. If such types of unauthorised and uncalled for deductions which tactfully are made by the traders to increase their net margins are identified and stopped, then the producers share in consumers price can be more enhanced.

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